We claim:

1. A method for identifying compounds that are selective partial A_{2A} adenosine receptor agonists with a short duration of action, comprising:

a. measuring the intrinsic efficacy of a test compound in a cell line that express adenosine A_{2A} receptors.

b. measuring the intrinsic efficacy of a full agonist in said cell line; and

c. selecting those compounds that have a lower intrinsic efficacy than said full agonist;

2. The method of claim 1, comprising the additional steps of measuring the binding affinity (K_i) of the selected compounds; and selecting a compound with a K_i>1 μM.

3. The method of claim 1, wherein said test compound is a selective A_{2A} adenosine receptor agonist.

4. The method of Claim 1, wherein said cell line is rat pheochromocytoma PC12 cells, HEK-293 cells or porcine striatal cells.

5. The method of Claim 4, wherein said cell line is rat pheochromocytoma PC12 cells.

6. The method of Claim 1, wherein said full agonist is CGS21680 or WRC 0470.

7. The method of Claim 6, wherein said full agonist is CGS21680.

8. The method of Claim 7, wherein the intrinsic efficacy of the compound is 10%-95% of the intrinsic efficacy of CGS21680.

9. The method of Claim 7, wherein the intrinsic efficacy of the compound is 50%-85% of the intrinsic efficacy of CGS21680.

10. The method of Claim 1, wherein said binding affinity of the selected compound is greater than or equal to 1 μM.

11. A method of myocardial perfusion imaging of a mammal, comprising administering a radionuclide and a compound identified by the method of claim 1 to a mammal in need thereof, and determining areas of insufficient blood flow.

12. The method of claim 11, wherein the compound is CVT-3033 or CVT-3146.

13. The method of Claim 12, wherein the dose of CVT-3033 or CVT-3146 is from 0.20 μg/kg to 9 μg/kg.

14. The method of Claim 12, wherein the dose of CVT-3033 or CVT-3146 is 0.25 to 5.0 μg/kg.